

The listing of the claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

Claim 1. (Currently amended) A gas delivery metering tube for delivering a gas, comprising:

an innermost elongated tube, said innermost tube having two ends, a gas delivery end that is, said innermost tube being attached to a gas supply at one end and capped at the other end, and an opposite, capped end, one or more arrays of orifices being formed in said innermost tube and extending along the substantial length of said innermost tube; and

an outermost elongated tube, said outermost tube having two ends where one end is disposed proximate to the gas delivery end of the innermost tube, one or more arrays of orifices being formed in said outermost tube and extending along the substantial length of said outermost tube, said outermost tube being disposed such that it is axially aligned with said innermost tube and such that an effective annular space is formed between said at least one innermost and outermost nested tubes;

wherein gas flowing into the innermost tube from the gas supply is introduced into the interior of the innermost tube at the gas delivery end, and wherein the innermost tube has the following properties:

$$L/D < 70$$

$$D/d \approx 10$$

$$N A_{\text{port}} / A_{\text{tube}} \approx 1$$

where L is the length and D is the diameter of the innermost tube, d is the diameter of one orifice in said array of orifices in said innermost tube, N is the number of orifices in the innermost tube, A_{port} is the cross sectional area of each of said orifices, and A_{tube} is the area of said innermost tube; and

the outermost tube has the following properties:

D_{eff} and D_{in} are within a factor of three of each other

$\text{SurfaceArea}_{\text{outer}} / N A_{\text{outer}} \approx 10$ or more

where D_{eff} is the effective diameter of the effective annular space, $\text{SurfaceArea}_{\text{outer}}$ is the surface area of the outermost tube, $N A_{\text{outer}}$ is the total cross sectional area of all of the orifices in the outermost tube, and D_{in} is the inner diameter of the innermost tube. the one or more arrays of orifices formed in said innermost tube establish a substantially uniform backing pressure along substantially the length of the innermost tube, thereby promoting to promote substantially

uniform delivery of the gas out of the orifices in the outermost tube and along substantially the length of the outermost tube over a range of operating conditions.

Claim 2 (Cancelled).

Claim 3. (Original) The gas delivery metering tube of claim 2 wherein D_{eff} is approximately equal to D_{in} .

Claim 4 (Cancelled).

Claim 5. (Currently amended) The gas delivery metering tube of claim 4 1 wherein said ratio is greater than 100 $SurfaceArea_{outer}/NA_{outer} > 100$

Claim 6. (Original) The gas delivery metering tube of claim 1 wherein said metering tube is used in a chemical vapor deposition system.

Claim 7. (Cancelled)

Claim 8. (Cancelled)

Claim 9. (Original) The gas delivery metering tube of claim 1 wherein the nested tubes are cylindrical.

Claim 10. (Original) The gas delivery metering tube of claim 1 wherein the nested tubes are rectangular.

Claim 11. (Original) In combination, the gas delivery metering tube of claim 1 and at least one injector assembly having at least one port for receiving said gas delivery metering tube.

Claim 12. (Original) In combination, the gas delivery metering tube of claim 1 and at least one shield assembly having at least one plenum for receiving said gas delivery metering tube.

Claims 13 to 16 (Cancelled).